

### **REMARKS**

The Office Action dated January 3, 2007 has been received and carefully noted. The following remarks, are submitted as a full and complete response thereto. Claims 1-85 are submitted for consideration.

Claims 1, 34, 37, 68, 78 and 85 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2001/0031635 to Baharatia (hereinafter Baharatia). The rejection is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in independent claims 1, 34, 37, 68, 78 and 85.

Claim 1, upon which claims 2-33 depend, recites a method including sending, from a visited network of a plurality of networks to a home network, an identification of a subscriber and an access to be provided to the subscriber. The method also includes in response to the identification of the subscriber and access to be provided to the subscriber, storing, in the visited network, a subscriber profile of an authorized access of a plurality of authorized accesses to be provided to the subscriber and controlling access of the subscriber to a network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses. An application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and the visited network receiving the request transmits an update location message to the home network for informing the home network of the

identification of the subscriber and a particular network at which the subscriber is located.

Claim 34, upon which claims 35-36 depend, recites a system including a home network which stores a plurality of subscriber profiles each defining an access to be provided to a subscriber of a network and a plurality of networks connected to the home network. The system also includes a subscriber equipment connected to a visited one of the plurality of networks through which the subscriber obtains an access to any network. In response to connection of the subscriber equipment to the visited network, an identification of the subscriber and an access to be provided to the subscriber is sent from the visited network to the home network, and a subscriber profile of an authorized access of a plurality of authorized accesses to be provided to the subscriber is stored in one of the plurality of networks and access of the subscriber to the network is controlled by one of the plurality of networks storing the subscriber profile dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses. An application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network, and the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located.

Claim 37, upon which claims 38-67 depend recites a method including during or after the subscriber registers in a network, providing an identification of the subscriber and an access of a plurality of accesses, to a visited network of a plurality of networks from a home network of the subscriber, the access comprising an identification of access from the plurality of accesses to one of the plurality networks in which the subscriber is registered. An application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located.

Claim 68, upon which claims 69-77 depend, recites method including providing an identification of the subscriber, to a visited network of at least one of a plurality of networks from a home network. The method also includes in response to the providing of the identification of the subscriber, storing a subscriber profile of an access of a plurality of accesses to be provided to the subscriber in the visited network and using the stored subscriber profile in controlling service provided to the subscriber. An application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located.

Claim 78, upon which claims 79-84 depend, recites a system including networks in which a subscriber may register and a home network in which a plurality of subscriber profiles are stored, each of the profiles defining an access to be provided to the subscriber while registered in the networks. The system includes a subscriber equipment which is connected to the networks while the subscriber is registered therein. In response to connection of the subscriber equipment to one of the networks at least an identification of the subscriber is provided from a visited network of the networks to the home network. A subscriber profile of an access of a plurality of accesses to be provided to the subscriber by at least one of the networks is stored, and the stored subscriber profile is used in controlling service provided to the subscriber. An application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located.

As will be discussed below, the cited prior art reference of Baharatia fails to disclose or suggest the elements of the presently pending claims.

Baharatia discloses that a Home Subscriber Service (HSS) is responsible for storing and managing (1) subscriber identification, numbering and addressing information; (2) user security information, for example, network access control information for authentication and authorization; (3) user location information at inter-

system level and (4) the subscriber profile, for example, services supported, service specific information, etc. Based upon this subscriber information, the HSS is also responsible for supporting the call control and short message entities of the different control systems offered by the system operator. A mobile terminal initiates registration by sending a registration request message to a serving CSCF, the request includes the identity of a corresponding subscriber. The serving CSCF requests the subscriber's profile from the HSS by sending a registration notification message to the HSS. In response to the receipt of the registration notification message, the HSS sends a registration cancellation message to the old CSCF. The old CSCF then erases the current information it stores for the subscriber and acknowledges the request by sending a registration cancellation confirmation message to the HSS. The HSS then provides the subscriber information to the serving SGSN via a registration notification acknowledgement message. Finally, the registration is confirmed to the mobile terminal by the serving CSCF in a registration confirmation message. See Figure 3 and paragraphs 0111-0116 of Baharatia.

Applicants submit that Baharatia does not teach or suggest each of the features recited in claims 1, 34, 37, 68, 78 and 85. The Office Action alleged that Baharatia teaches wherein an application level registration message including the identification of the subscriber is generated **in response** to a request from a subscriber equipment to the visited network, and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the

identification of the subscriber and a particular network at which the subscriber is located, as recited in claims 1, 34, 37, 68, 78 and 85. The cited sections of Baharatia discloses that a mobile terminal **initiates registration by sending a registration request message** to a serving CSCF, the request includes the identity of a corresponding subscriber. Therefore, in Baharatia, the registration request message is not generated **in response to** a request from the subscriber equipment to the visited network, as recited in claims 1, 34, 37, 68, 78 and 85. Rather, in Baharatia, the registration request message is the request from the subscriber equipment to the visited network.

There is also no teaching or suggestion in Baharatia that the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located, as recited in claims 1, 34, 37, 68, 78 and 85. In Baharatia, the visited network merely requests the subscriber's profile from the HSS. There is no teaching or suggestion in Baharatia of the visited network informing the home network of a particular network in which the subscriber is located, as alleged in the Office Action. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §102(e) should be withdrawn because Baharatia fails to teach or suggest each feature of claims 1, 34, 37, 68, 78 and 85.

Claims 1-31 and 34-85 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,742,668 Pepe (hereinafter Pepe) in view of U.S. Patent No. 6,611,685 to Rune (hereinafter Rune). According to the Office Action, Pepe teaches

all of the elements of claims 1 and 85 except for disclosing an update location message. Therefore, the Office Action combined the teachings of Pepe and Rune to yield all of the elements of claims 1-31 and 34-85. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited claims 1-31 and 34-85.

Pepe relates to an electronic messaging network. Pepe describes a personal communications interworking (PCI) 40 connected between wireless network 39 and wireline network 29. PCI 40 permits the mobile communications subscriber to send and receive messages between disparate networks, messaging systems and a variety of service providers. Figure 3 of Pepe shows PCI 40 and a PCI database 44 that stores and updates subscriber profiles. Pepe describes that the PCI provides the subscriber with control over the message routing and delivery by the subscriber accessible "subscriber profile" stored in the PCI. The subscriber profile contains subscriber programmed instructions on message receipt, origination and notification. PCI 40 operates as a messaging gateway for providing access to multiple wireline and wireless networks, while using subscriber profile information to control sending and receiving options. PCI 40 allows wireless service providers to integrate the voice messaging, e-mail, and fax message services for one subscriber through a single telephone number. Thus, Pepe describes one phone number that provides a single link between the service provider and the subscriber's voice and data communications lines.

Pepe also discloses that there are two types of registration and deregistration: explicit and implicit. For explicit registration, once the subscriber is successfully registered, if the subscriber's profile is not already present in the PCI server, the PCI server will request a download from the PCI database. See at least page 15, line 66-page 16, line 35 and Figure 12 of Pepe.

Rune discloses that a gateway location register receives a reset message from a home location register when the home location register is recovering from a fault. The gateway location register determines which mobile subscribers are associated with the home location register. The gateway location register sends a reset message, with the gateway location register number instead of the home location register number, to a visited location register where at least one of the mobile subscribers associated with the home location register is located. The reset message causes the visited location registers to begin a location updating procedure. The gateway location register receives an update location message from a visited location register that received the reset message. If a "location information confirm in HLR" flag is set to not confirmed, the gateway location register will respond to the update location messages after sending subscription information for the mobile subscriber; otherwise, the gateway location register sends an update location message to the home location register. See at least Col. 5, line 56-Col. 6, line 54 and Figures 6A and 6B.

Applicants submit that the combination of Pepe and Rune fails to teach or suggest the combination of features recited in claims 1-31 and 34-85. Specifically, Pepe does not



teach or suggest wherein an application level registration message including the identification of the subscriber and is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located, as recited in the independent claims.

Rune does not cure any of the deficiencies of Pepe. Unlike what is alleged in the Office Action, Rune does not teach or suggest that the visited network transmits an update location message to the home network for informing the home network of the identification of the subscriber. Rather, in Rune the subscription information is sent from the gateway location register to the visited location register if a “location information confirm in HLR” flag is set to not confirm when the gateway location register receives the update location message from the visited location register. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Pepe nor Rune, whether taken singly or combined teaches or suggest each feature of claims 1, 34, 37, 68, 78 and 85, and hence dependent claims 2-32, 35-36, 38-67, 69-77 and 79-84 thereon.

Claims 32 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe in view of U.S. Patent No. 6,148,199 to Hoffman (hereinafter Hoffman). According to the Office Action, Pepe teaches all of the elements of claims 32 and 33 except for the application level registration message. Therefore, the Office Action combined Pepe and

Hoffman to yield all of the elements of claims 32 and 33. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, upon which claims 32 and 33 depend.

Pepe has been discuss above. Hoffman discloses that a typical communications network includes a home location register (HLR) that includes user information, user profiles, feature activation status, and access privileges. When a network equipment receives a request for registration from a communication unit, the network equipment accesses the HLR, finds a corresponding subscriber record and determines what features to activate for the communication unit. The information is transferred to a visitor location register (VLR) which tracks the communication unit's location in the system.

Claim 32 and 33 depend on claim 1. Hoffman does not cure the deficiency of Pepe, as outlined above. Specifically, neither Hoffman nor Pepe teaches or suggests wherein an application level registration message including the identification of the subscriber and is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located, as recited in claim 1, upon which claims 32 and 33 depend. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Pepe nor Hoffman, whether taken singly or combined teaches or suggest each feature of claim 1, and hence dependent claim 32 and 33 thereon.

Claims 1, 34, 37, 68 and 78 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,745,029 Lahtinen (hereinafter Lahtinen) in view of U.S. Patent No. 6,769,000 to Akhtar. According to the Office Action, Lahtinen teaches all of the elements of the claims except teaching an application level registration message or an update location message. Therefore, the Office Action combined Lahtinen and Akhtar to yield all of the elements of claims 1, 34, 37, 68 and 78. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, 34, 37, 68 and 78, each of which is discussed above.

Lahtinen discloses that a subscriber moving from one network to another will have available all the supplementary network services that the subscriber's user terminal supports. Supplementary services are always associated with a certain amount of data which has to be stored in a permanent subscriber database and transferred to a system visited at a particular time. A method implemented in Lahtinen includes initiating by at least one user terminal the registration in the visited network which includes at least one network-specific supplementary service. The method also includes transferring the data relating to the common services of the home network and the visited network, in connection with the registration, from the subscriber database of the home network for temporary storage to the subscriber database of the visited network. Col. 2, lines 39-46 and Col. 3, lines 17-26.

Akhtar discloses a communications architecture for enabling IP-based mobile communications. Each of claims 1, 34, 37, 68 and 78 recite wherein an application level registration message including the identification of the subscriber and is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located. Neither Lahtinen nor Akhtar teaches or suggests these features. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Lahtinen nor Akhtar, whether taken singly or combined, teaches or suggests each feature of claims 1, 34, 37, 68 and 78.

Claims 1, 34, 37, 68 and 78 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of U.S. Patent No. 6,947,432 to Roy (hereinafter Roy). According to the Office Action, Hoffman teaches all of the elements of claims 1, 34, 37, 68 and 78 except for the application level registration message or the update location message. Therefore, the Office Action combined Roy and Hoffman to yield all of the elements of claims 1, 34, 37, 68 and 78. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, 34, 37, 68 and 78, each of which is discussed above.

Hoffman has been discussed above. Roy discloses that a mobile entity's location information is updated with a home location function using a request message because

the mobile entity is now in a visited network in its home zone. The home location function stores that the mobile entity is associated with a different network and, in the event of an inter-zone move, the identity of the visiting zone and network. The home location function sends the a location update confirmation to a home gatekeeper which sends back a registration message to the mobile entity. See at least Col. 8, line 43-Col. 9, line 10.

Each of claims 1, 34, 37, 68 and 78 recites wherein an application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located. Hoffman does not recite these features.

Roy does not cure any of the deficiencies of Hoffman. Specifically, Roy does not seem to teach or suggest wherein an application level registration message including the identification of the subscriber is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located, as recited in claims 1, 34, 37, 68 and 78. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn


because neither Hoffman nor Roy, whether taken singly or combined, teaches or suggests each feature of claims 1, 34, 37, 68 and 78.

As noted previously, claims 1-85 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-85 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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